

AMENDMENT TO THE CLAIMS

1. (currently amended) A disc drive comprising:
  - a top cover;
  - a base plate attached to the top cover;
  - a printed circuit board assembly ("PCBA") attached to a bottom surface of the base plate;
  - an electrical connector secured to an edge of the PCBA ~~having plurality of pins which extend generally parallel with a plane of the PCBA;~~
  - a guide pin protruding from one of the base plate and the electrical connector, ~~the guide pin extending generally perpendicular to the plurality of pins;~~
  - and
  - an opening defined in the other of the base plate and the electrical connector, wherein the guide pin is received within the opening to position the electrical connector relative to the base plate.
2. (previously presented) The disc drive of claim 1 wherein:
  - the opening is defined in the bottom surface of the base plate and extends vertically upward toward the top cover; and
  - the guide pin protrudes from the electrical connector and extends vertically upward to fit within the opening defined in the base plate.
3. (canceled)
4. (original) The disc drive of claim 2 wherein:
  - the base plate is formed from cast aluminum; and
  - the opening is formed as a cast feature of the base plate.

5. (original) The disc drive of claim 2 wherein:
  - the base plate is formed from cast aluminum; and
  - the opening is machined into the base plate.
6. (original) The disc drive of claim 2 wherein the electrical connector is formed from a molded plastic material and the guide pin is formed as an integral molded feature of the electrical connector.
7. (original) The disc drive of claim 6 wherein:
  - the opening in the base plate comprises an elongated slot; and
  - the guide pin includes a chamfered tip.
8. (original) The disc drive of claim 7 wherein:
  - the guide pin has a predetermined length; and
  - the elongated slot has a predetermined depth that is greater than the predetermined length of the guide pin to prevent the tip of the guide pin from contacting a bottom surface of the slot.
9. (original) The disc drive of claim 8 wherein:
  - the bottom surface of the base plate includes a spindle motor electrical connector;
  - a top surface of the PCBA includes contact pads for engaging the spindle motor electrical connector; and
  - the predetermined length of the guide pin is sufficient to allow the tip of the guide pin to be received within the slot while the PCBA is suspended above the bottom surface of the base plate by contact between the PCBA contact pads and the spindle motor electrical connector.
10. (original) The disc drive of claim 2 wherein:

the electrical connector includes a plurality of data pins extending laterally from a front surface of the connector; and  
the guide pin is positioned adjacent a predetermined one of the data pins.

11. (original) The disc drive of claim 2 wherein:

the base plate defines a plurality of openings extending vertically upward toward the top cover; and  
the electrical connector includes a plurality guide pins extending vertically upward from the electrical connector, wherein each guide pin is received within a corresponding opening defined in the base plate to position the electrical connector relative to the base plate.

12. (currently amended) A method of positioning an electrical connector of a printed circuit board assembly ("PCBA") relative to a base plate of a disc drive, the method comprising steps of:

(a) inserting a guide pin formed on one of the electrical connector and ~~a bottom surface of the base plate~~ into an opening formed in the other of the electrical connector and ~~the bottom surface of the base plate~~ to align the electrical connector with the base plate, ~~the electrical connector having plurality of pins which extend generally parallel with a plane of the PCBA and wherein the guide pin extending generally perpendicular to the plurality of pins;~~ and

(b) fastening the PCBA to ~~the bottom surface of the base plate~~ of the disc drive while the guide pin remains within the opening.

13. (original) The method of claim 12 wherein the guide pin is formed on the electrical connector and the opening is formed in the base plate of the disc drive.

14. (original) The method of claim 13 further comprising a step (c) of aligning the PCBA with the base plate of the disc drive so that mounting holes formed within the PCBA are aligned with threaded openings formed in the base plate, prior to the fastening step (b).

15. (canceled)

16. (original) The method of claim 14 wherein the base plate includes a spindle motor electrical connector and the PCBA includes contact pads for engaging the spindle motor electrical connector, and wherein:

aligning step (c) further includes aligning the PCBA contact pads with the spindle motor electrical connector, prior to the fastening step (b); and  
the guide pin has a predetermined length sufficient to allow a tip of the guide pin to be received within the opening following the aligning step (c) and prior to the fastening step (b).

17. (original) The method of claim 14 wherein the electrical connector is formed from a molded plastic material and the guide pin is formed as an integral molded feature of the electrical connector.

18. (original) The method of claim 17 wherein:

the electrical connector includes a plurality of data pins extending laterally from a front surface of the connector; and  
the guide pin is positioned adjacent a predetermined one of the data pins.

19. (currently amended) A disc drive including a base plate and a printed circuit board assembly ("PCBA") attached to the base plate, the disc drive comprising:

an electrical connector attached to one end of the PCBA, the electrical connector having a plurality of data pins ~~and which extend generally parallel with a~~

~~plane of the PCBA~~ adapted to mate with a female connector in a computer system; and

means for aligning the electrical connector relative to the base plate so that the data pins will be received within corresponding sockets of the female connector when the disc drive is installed within the computer system.

20. (original) The disc drive of claim 19 further comprising means for securing the PCBA to the base plate, and wherein:

the means for securing the PCBA to the base plate are separate from the means for aligning the electrical connector relative to the base plate.

21. (previously presented) The disc drive of claim 1 further comprising data pins extending from the electrical connector substantially lateral to the guide pin.

22. (previously presented) The disc drive of claim 2 wherein:

the bottom surface of the base plate includes a plurality of threaded openings;

the PCBA includes a plurality of oversized mounting holes corresponding to the threaded openings in the base plate; and

the PCBA is attached to the bottom surface of the base plate by a plurality of threaded fasteners that extend through the oversized mounting holes while the guide pin is received within the opening.

23. (currently amended) The method of claim 14 wherein:

fastening step (b) further comprises inserting a ~~threaded~~ threaded fastener through each of the mounting holes in the PCBA and into the corresponding threaded opening in the base plate; and

the mounting holes in the PCBA are oversized relative to a shaft of the threaded fastener to prevent the threaded fastener from binding against the PCBA.

24. (new) The disc drive of claim 1 wherein the bottom surface of the base plate comprises an outer surface.

25. (new) The method of claim 14 wherein the bottom surface of the base plate comprises an outer surface.